

Title (en)

CATALYST DETERIORATION DIAGNOSIS SYSTEM AND METHOD FOR INTERNAL COMBUSTION ENGINE

Title (de)

SYSTEM ZUR DIAGNOSE VON KATALYSATORBEEINTRÄCHTIGUNG UND VERFAHREN FÜR VERBRENNUNGSMOTOREN

Title (fr)

SYSTÈME DE DIAGNOSTIC DE DÉTÉRIORATION DE CATALYSEUR ET PROCÉDÉ APPLIQUÉ AU MOTEUR À COMBUSTION INTERNE

Publication

**EP 2318677 B1 20160831 (EN)**

Application

**EP 09786043 A 20090722**

Priority

- IB 2009006315 W 20090722
- JP 2008192640 A 20080725

Abstract (en)

[origin: WO2010010448A1] A catalyst deterioration diagnosis system performs a diagnosis of deterioration of the oxidation catalyst (12) based on a high-temperature-inflow-condition exhaust gas temperature and a low-temperature-inflow-condition exhaust gas temperature. The high-temperature-inflow-condition exhaust gas temperature is a temperature detected by a temperature sensor (44) while the temperature of the exhaust gas that flows into the oxidation catalyst (12) is in a high temperature region H while the reducing agent is supplied from the reducing agent supply means (16) into the exhaust gas that flows into the oxidation catalyst (12). The low-temperature-inflow-condition exhaust gas temperature is a temperature detected by the temperature sensor (44) while the temperature of the exhaust gas that flows into the oxidation catalyst (12) is in a low temperature region L while the reducing agent is supplied from a reducing agent supply means (16) into the exhaust gas that flows into the oxidation catalyst (12).

IPC 8 full level

**F01N 11/00** (2006.01); **F01N 3/08** (2006.01); **F01N 3/20** (2006.01); **F01N 9/00** (2006.01); **F02D 41/14** (2006.01)

CPC (source: EP US)

**F01N 3/2066** (2013.01 - EP US); **F01N 11/002** (2013.01 - EP US); **F02D 41/1446** (2013.01 - EP US); **F02D 41/1447** (2013.01 - EP US);  
**F01N 3/0885** (2013.01 - EP US); **F01N 3/2033** (2013.01 - EP US); **F01N 3/208** (2013.01 - EP US); **F01N 9/002** (2013.01 - EP US);  
**F01N 2550/02** (2013.01 - EP US); **F01N 2560/06** (2013.01 - EP US); **F01N 2610/03** (2013.01 - EP US); **F02D 2200/0804** (2013.01 - EP US);  
**Y02T 10/12** (2013.01 - EP US); **Y02T 10/40** (2013.01 - EP US)

Citation (examination)

JP 2008144711 A 20080626 - TOYOTA MOTOR CORP

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**WO 2010010448 A1 20100128**; CN 102105663 A 20110622; CN 102105663 B 20140101; EP 2318677 A1 20110511; EP 2318677 B1 20160831;  
JP 2010031697 A 20100212; JP 4530081 B2 20100825; US 2011126517 A1 20110602; US 8490385 B2 20130723

DOCDB simple family (application)

**IB 2009006315 W 20090722**; CN 200980128921 A 20090722; EP 09786043 A 20090722; JP 2008192640 A 20080725;  
US 200913055062 A 20090722